BRAC 2005 Infrastructure Steering Group (ISG)

Meeting Minutes of February 23, 2004

The Acting Under Secretary of Defense (Acquisition, Technology, and Logistics), Mr. Michael W. Wynne chaired this meeting. The list of attendees is attached.

Mr. Wynne opened the meeting and stated that he would have the lead principals of each of the major subgroups of the Industrial JCSG brief their approach to military value. Major General Hamp McManus started by briefing the Munitions and Armaments military value approach. Members of the ISG asked Major General McManus whether his approach would examine the resources of the private sector. General McManus and the ISG Chair noted that the capabilities of the private sector should be considered as part of scenario development rather than during the military value phase.

General McManus then proceeded to brief the details of the Munitions and Armaments function's scoring plan. A number of the ISG members questioned the calculations presented as well as how the criteria were displayed in the briefing slides. A few of the ISG members also suggested that the weight for criteria four (cost of operations and manpower) should be higher. The ISG also expressed concern about whether the requirements for ammunition production were realistic given the recent increase in operational tempo. The ISG Chair and General McManus agreed to re-examine the calculations to match the intent of the Munitions and Armaments function. General McManus noted that the concern with the criteria was an issue of truncating the words of the criteria too much to fit on the briefing slides. He also agreed to review the military value report to address the ISG's other concerns. A number of the ISG members asked about how this function differed from the functions being evaluated by the Supply and Storage JCSG. General McManus noted that his group was looking at life cycle ammunition management to include storage and added that he and Vice Admiral Holder, the Chair of the Supply and Storage JCSG, have agreed to work together to ensure complementary evaluations.

Following General McManus, Rear Admiral Mark Hugel briefed the ISG on the ship overhaul and repair function. He described the scoring approach by reviewing some of the metrics and weights. During the discussion, some ISG members asked how projected military construction would be handled during the military value analysis and why ships were considered a joint function. The ISG agreed that military construction projects would only be counted for those projects that had been appropriated as of the Fiscal Year 2004 appropriations act. After a short discussion, the ISG Chair stated that it was appropriate for the Industrial JCSG to evaluate the ship overhaul and repair function.

Mr. Ron Orr gave the final Industrial JCSG brief. Mr. Orr described the maintenance function's strategy for military value. During the briefing, an ISG member asked whether a facility with a more efficient smaller workforce would score less than a facility with a larger less efficient workforce. Mr. Orr responded by stating that for some

military value metrics the more efficient workforce facility would score better than the facility with more capacity. He also stated that a possible outcome of the Industrial JCSG's recommendation could be closing large facilities that have high capacity while leaving smaller more efficient facilities open.

Later in the discussion, an ISG member asked whether the Industrial JCSG approach to military value was properly considering the disparate commodities (e.g. aircraft maintenance vice truck maintenance) being reviewed. Mr. Orr responded that the maintenance sub-groups had "Red Teamed" their data call with a group of cross-service experts, whom he described as leaders in the maintenance field, who found the JCSG's approach acceptable. He added that specific differences could be evaluated through scenario and COBRA data calls if necessary.

The discussion of the Industrial JCSG's approach ended with a brief ISG discussion of policy imperatives and scenario development. The ISG agreed that policy imperatives were a critical step in the process and that their impact was in scenario development where the imperatives act as a constraint on what can and cannot be done. The ISG agreed that the military departments should start to define policy imperatives, especially those that have joint application. The ISG also expressed its intent that the JCSGs will develop their approach to scenario development for review by the ISG in much the same way they have described their approaches for capacity and military value analysis.

Approved:

ichael W. Wynge

Acting USD(Acquisition Technology and Logistics)

Chairman, Infrastructure Steering Group

Attachments:

- 1. List of Attendees
- 2. Briefing slides entitled "Industrial JCSG Approach to Assessing Military Value" February 23, 2004

Infrastructure Steering Group Meeting February 23, 2004

Attendees

Members:

- Mr. Michael W. Wynne Acting Under Secretary of Defense (Acquisition, Technology and Logistics)
- Mr. Raymond DuBois, Deputy Under Secretary of Defense (I&E)
- Hon. H.T. Johnson, Assistant Secretary of the Navy (I&E)
- Mr. Geoffrey Prosch, for Acting Assistant Secretary of the Army (I&E)
- Admiral William Mullen, Vice Chief of Naval Operations
- Hon. Nelson Gibbs, Assistant Secretary of the Air Force (IE&L)

Alternates:

- Lieutenant General James Cartwright, Director, Force Structure, Resources and Assessment, Joint Staff for General Peter Pace, Vice Chairman, Joint Chiefs of Staff
- Major General Gary W. Heckman, Assistant Deputy Chief of Staff of the Air Force for Plans and Programs for General Michael Mosley, Vice Chief of Staff of the Air Force
- Lieutenant General Richard Kelly, Deputy Commandant Installations & Logistics for General William Nyland, Assistant Commandant of the Marine Corps
- Major General Larry Lust, Assistant Chief of Staff for Installations for General George Casey, Vice Chief of Staff, Army

Industrial JCSG

- Major General "Hamp" McManus, Commander, Operations Support Command
- Rear Admiral Mark Hugel, Deputy Commander, Maintenance and I&D Ops, Naval Sea Systems Command
- Mr. Ron Orr Principal Deputy Assistant Secretary of the Air Force (Installations, Environment & Logistics)
- BGen Willie Williams Director, Facilities and Services Division, HQ USMC
- Major General Saunders Vice Director Defense Logistics Agency

Headquarters and Support Activities JCSG

• Mr. William Davidson, Administrative Assistant to the Secretary of the Air Force

Supply and Storage

• Vice Admiral Gordon Holder, Director Logistics J4 Joint Staff

Others:

- Dr. Craig College, Deputy Assistant of the Army (I&A)
- Ms. Anne Davis, Deputy Assistant Secretary of the Navy (I&A)
- Mr. Phil Grone, Principal Assistant Deputy Under Secretary (Installations and Environment)
- Mr. Pete Potochney, Director, OSD BRAC
- Mrs. Nicole Bayert, Associate General Counsel, Environment and Installations, DoD
- Mr. David Steensma, Assistant Deputy Inspector General for Auditing
- Mr. Andrew Porth, Assistant Director, OSD BRAC
- Commander John Lathroum, Force Integration Branch Officer, Forces Division, J-
- Mr. Jay Berry, Acting Executive Secretary to the Industrial Joint Cross Service Group
- Mr. Mark Van Gilst, Office of the Principal Deputy Assistant Secretary of the Air Force (Installations, Environment & Logistics)
- Ms. Susan Kinney, Deputy Director, Logistic Plans, Policy and Strategic Mobility Division, Headquarters Marine Corps
- Ms. Willie Smith, Chief BRAC Division, Joint Munitions Center



BRAC 2005 JCSG Approach to Military Value

Briefing to the Infrastructure Steering Group

February 23, 2004



JCSG Military Value Briefing Schedule

Schedule for Military Value briefings

✓ Feb 17 @ 14:00-15:00 Technical

✓ Feb 19 @ 10:00-11:00 Medical

✓ Feb 20 @ 14:30-15:30 Supply & Storage

• Feb 23 @ 09:00-10:00 Industrial (from Feb 12)

• Feb 23 @ 13:00-14:00 H&SA

• Feb 24 @ 10:00-11:00 Education & Training

• Mar TBD Intelligence



Industrial Joint Cross Service Group Military Value Analysis

Honorable Michael Wynne Acting USD, (AT&L) February 23, 2004



AGENDA

- Introductions
- Interim Selection Criteria
- Approach
- Functions
 - Munitions and Armament
 - Maintenance
 - Ship Overhaul and Repair
- Next Step



Military Value Selection Criteria

- 1. The current and future mission capabilities and the impact on operational readiness of the Department of Defense's total force, including the impact on joint warfighting, training, and readiness.
- 2. The availability and condition of land, facilities and associated airspace (including training areas suitable for maneuver by ground, naval, or air forces throughout a diversity of climate and terrain areas and staging areas for the use of the Armed Forces in homeland defense missions) at both existing and potential receiving locations.
- 3. The ability to accommodate contingency, mobilization, and future total force requirements at both existing and potential receiving locations to support operations and training.
- 4. The cost of operations and the manpower implications.



Approach

- Guidance provided to JCSGs on December 23, 2003
- Functions (Munitions & Armament; Maintenance; and Ship Overhaul & Repair)
 - Selection Criteria
 - Using the draft #1-4 criteria published December 23, 2003 in the Federal Register
 - Each function evaluated against all four criteria
 - Attributes
 - Some attributes are weighed under more than one criteria
 - Metrics
 - Questions
 - Developed questions and/or tables for each function/attribute
 - Query capacity data call responses
- All weighting based on 0-100 point scale



Industrial JCSG Functions

- Three Sub-Groups
 - Total life cycle management of munitions (MG Hamp McManus, Chair)
 - Sub Functions:
 - Munitions Production
 - Munitions Maintenance
 - Storage and Distribution
 - Demilitarization
 - Armament Production
 - Maintenance (Mr. Ronald Orr, Chair)
 - Depot Maintenance
 - Combat Field Support/Intermediate Maintenance (Non Deployable in Fixed Installations)
 - Ship Overhaul & Repair (RADM Bill Klemm, Chair)
 - Depot Level (Naval Shipyards)
 - Intermediate Level
 - Non-Deployable I-Level only
 - Ship Intermediate Maintenance Activities & Trident Refit Facilities



APPROACH

■ Total life cycle management of munitions

- **■** Functions:
 - Production
 - Maintenance
 - Storage and distribution
 - Demilitarization
- Armament Production



Munitions Production

35%	CRITERIA 1: READINESS/CAPABILITY TO SUPPORT KNOWN MISSIONS				
	60%	CAPABIL	ITY		
		100%	Processes - Munitions Production		
	40%	CAPACIT	Υ		
		100%	Munitions Production		
15%	CRITERI	A 2: AVA	ILABILITY AND CONDITION OF INFRASTRUCTURE		
	30%	FACILITY	CONDITION		
		100%	Condition of facilities		
	70%	EXPANSI	ON CAPABILITY		
		40%	Buildable acreage		
		60%	Unutilized Plant capacity		
45%	CRITERI	A 3: FLEXIBILITY TO SUPPORT UNKNOWN MISSIONS			
	40%	CAPABIL	CAPABILITY		
		100%	Processes-Munitions Production		
	60%	CAPACIT	Υ		
		100%	Munitions Production		
5%	CRITERI	RIA 4: OPERATION AND MANPOWER COST			
	80%	FIXED CC	FIXED COST		
		100%	Cost required to open the doors		
	20%	LABOR			
		50%	Number of Government employees and size of payroll		
		50%	Number of Contractor employees and size of payroll		



Munitions Production

35%	CRIT	RITERIA 1: READINESS/CAPABILITY TO SUPPORT KNOWN MISSION				
	60%	CAP	ABILITY			
		100%	PROCE	SSES: MUNITION PRODUCTION		
			33.3%	What munitions explosive processes are resident at your site and which processes did you perform within the last TWO years? (TABLE 1)		
			33.3%	What munitions metal parts processes are resident at your site and which processes did you perform within the last TWO years? (TABLE 2)		
			33.3%	What munitions LAP processes are resident at your site and which processes did you perform within the last TWO years? (Table 3)		
	40%	CAP	CAPACITY			
		100%	CAPA	CITY: MUNITIONS PRODUCTION		
			100%	What percentage of your max capacity are you currently producing?		



Munitions Production Capability

- Question: What munitions explosive, metal parts, and LAP processes are resident at your site and which processes did you perform within the last TWO years?
- Results will:
 - Identify critical munitions production processes
 - Define:
 - What installation performs the functions?
 - INDICATOR: DUPLICATION
 - How many processes the installation performs?
 - INDICATOR: FLEXIBILITY/MULTI-FUNCTIONAL
 - How recently the installation performed the process?
 - <u>INDICATOR:</u> AVAILABLE SKILLED WORKFORCE



Munitions Production Capacity

- Question: What percentage of your maximum capacity are you currently producing?
- Results will:
 - Identify capacity by commodity and location
 - Show whether a facilities current operation is at 40% or 80% or 90% of max capacity
 - Identify sites suitable for 3 Rs:
 - Relocation
 - Reduction
 - Realignment



Explosive Processes (Table 1)

- Explosive and/or propellant cold cast cure to include vacuum casting and/or injecting capability.
- 2. Melt Pour to include metal parts pre-conditioning and post pour controlled cooling.
- 3. Precision Explosive Pressing to include explosive billet machining and sufficient tonnage and press daylight clearance for missiles.
- 4. Extrusion of explosives and propellants.
- 5. Kinetic Energy Munitions precision weigh and fill of propellant.
- 6. Loaded Components and initiating devices (primers, delays, relays, detonators) to include drying, blending and handling equipment for initiating equipment that precludes direct personnel exposure.
- 7. Infrared Decoy Flare pressing and/or extrusion.
- 8. Smoke munitions mixing and pressing.
- 9. Nitration of cotton linters or wood pulp.
- 10. Nitration of hexamine.
- 11. Manufacture of Nitrate esters.

Scoring Plan: Installation checks if they can perform one or more process

- -1 to 2 explosive processes receive 5 points
- -3 explosive processes receive 20 points
- -4 explosive processes receive 30 points
- -5 or more explosive processes receive 45 points



Metal Parts (Table 2)

- 1. Deep Draw Steel Cartridge Cases
- 2. Grenade Cargo Metal Parts
- 3. Projectile forging, heat treat and machining
- 4. High frag projectile metal parts to include large caliber forging (1000 ton presses), heat treat, ultrasonic and machining

Scoring Plan: Installation checks if they can perform one or more process

- -1 metal parts process receive 15 points
- -2 metal parts processes receive 30 points
- -3 metal parts processes receive 55 points



Load, Assemble and Pack (LAP) (Table 3)

1. Navy Gun	10. Small Cal
2. Mortar	11. Bombs
3. FASCAM	12. Grenades
4. Artillery	13. Missiles
5. Tank	14. Torpedo
6. Missile Warhead	15. CAD/PAD
7. Med Cal	16. Smoke Munitions
8. MICLIC, Demo Blocks	17. Kinetic Energy Munitions
9. ICM Artillery and MLRS	18. Flares

Scoring Plan: Installation checks if they can perform one or more process

- -1 to 2 LAP processes receive 5 points
- -3 LAP processes receive 25 points
- -4 LAP processes receive 30 points



Munitions Maintenance

25%	CRITERIA	CRITERIA 1: READINESS/CAPABILITY TO SUPPORT KNOWN MISSIONS			
	60%	CAPABIL	ITY		
		100%	Processes – Munitions Maintenance		
	40%	CAPACIT	Υ		
		100%	Munitions Maintenance		
20%	CRITERIA	A 2: AVAI	LABILITY AND CONDITION OF INFRASTRUCTURE		
	30%	FACILITY	CONDITION		
		100%	Condition of facilities		
	70%	EXPANSI	ON CAPABILITY		
		40%	Buildable acreage		
		60%	Unutilized Plant capacity		
50%	CRITERIA	4 3: FLEX	3: FLEXIBILITY TO SUPPORT UNKNOWN MISSIONS		
	40%	CAPABIL	CAPABILITY		
		100%	Processes-Munitions Maintenance		
	60%	CAPACIT	Υ		
		100%	Munitions Maintenance		
5%	CRITERIA	IA 4: OPERATION AND MANPOWER COST			
	80%	FIXED CO	FIXED COST		
		100%	Cost required to open the doors		
	20%	LABOR			
		50%	Number of Government employees and size of payroll		
		50%	Number of Contractor employees and size of payroll		



Storage/Distribution

25%	CRIT	ERIA	1: READINESS/CAPABILITY TO SUPPORT KNOWN MISSIONS				
	100%	CAPACITY					
		30%	Storage Capacity				
		70%	Distribution Capacity				
20%	CRIT	ERIA	2: AVAILABILITY AND CONDITION OF INFRASTRUCTURE				
	30%	FACI	LITY CONDITION				
		100%	Condition of facilities				
	70%	EXP	ANSION CAPABILITY				
		50%	Buildable acreage				
		50%	Unutilized Plant capacity				
50%	CRIT	ERIA	3: FLEXIBILITY TO SUPPORT UNKNOWN MISSIONS				
	100%	CAP	ACITY				
		30%	Storage Capacity				
		70%	Distribution Capacity				
5%	CRIT	ERIA	ERIA 4: OPERATION AND MANPOWER COST				
	80%	FIXE	O COST				
		100%	Cost required to open the doors				
	20%	LABC	LABOR				
		50%	Number of Government employees and size of payroll				
		50%	Number of Contractor employees and size of payroll				



Demilitarization

25%	CRITERIA	CRITERIA 1: READINESS/CAPABILITY TO SUPPORT KNOWN MISSIONS			
	60%	CAPABIL	CAPABILITY		
		100%	Processes - Demilitarization		
	40%	CAPACIT	Υ		
		100%	Demilitarization		
20%	CRITERIA	A 2: AVAI	LABILITY AND CONDITION OF INFRASTRUCTURE		
	30%	FACILITY	CONDITION		
		100%	Condition of facilities		
	70%	Expansion	on capability		
		40%	Buildable acreage		
		60%	Unutilized Plant capacity		
50%	CRITERIA	A 3: FLEX	3: FLEXIBILITY TO SUPPORT UNKNOWN MISSIONS		
	40%	CAPABIL	CAPABILITY		
		100%	Processes-Demilitarization		
	60%	CAPACIT	Υ		
		100%	Demilitarization		
5%	CRITERIA	IA 4: OPERATION AND MANPOWER COST			
	80%	FIXED CC	FIXED COST		
		100%	Cost required to open the doors		
	20%	LABOR			
		50%	Number of Government employees and size of payroll		
		50%	Number of Contractor employees and size of payroll		



Armament Production

45%	CRITERIA	CRITERIA 1: READINESS/CAPABILITY TO SUPPORT KNOWN MISSIONS			
	60%	CAPABIL	CAPABILITY		
		100%	Processes – Armament Production		
	40%	CAPACIT	Υ		
		100%	Armament Production		
15%	CRITERIA	A 2: AVAI	LABILITY AND CONDITION OF INFRASTRUCTURE		
	30%	FACILITY	CONDITION		
		100%	Condition of facilities		
	70%	Expansion	on capability		
		40%	Buildable acreage		
		60%	Unutilized Plant capacity		
35%	CRITERIA	A 3: FLEX	3: FLEXIBILITY TO SUPPORT UNKNOWN MISSIONS		
	40%	CAPABIL	CAPABILITY		
		100%	Processes-Armament Production		
	60%	CAPACIT	Υ		
		100%	Armament Production		
5%	CRITERIA	A 4: OPERATION AND MANPOWER COST			
	80%	FIXED CC	FIXED COST		
		100%	Cost required to open the doors		
	20%	LABOR			
		50%	Number of Government employees and size of payroll		
		50%	Number of Contractor employees and size of payroll		



Summary

- Strategy of the munitions and armament analysis is to identify:
 - Where is production, maintenance, demil or storage occurring?
 - What is the installation's current and max capacity?
 - What capabilities exist?
 - What is the level of skill among the workforce?
 - Through consolidation of functions, where can we accomplish savings through:
 - Relocation
 - Reduction
 - Realignment



Maintenance

- Two Functions
 - Depot Maintenance
 - Combat Field Support/Intermediate
 Maintenance (Non Deployable in Fixed Installations)
- Each Function Is Broken Out by Commodities
 - Military Value Determined at Commodity Level



Depot Maintenance

40%	CRITERIA 1:	READINES	S/CAPABILITY TO SUPPORT KNOWN MISSIONS
	45%	Maintenand	ce Capability
		60%	Workforce and Skills
		25%	Equipment
		15%	Last Source/Directed Workload
	30%	Interservice	e and Commercial Partnerships
		67%	Interservice
		33%	Commercial Partnerships
	25%	Proximity (Considerations
		100%	Integrated Activities
30%	CRITERIA 2	: AVAILABI	LITY AND CONDITION OF INFRASTRUCTURE
	10%	Expansion	Potential
		100%	Buildable Acres
	60%	Facilities	
		100%	Size, Type, and Condition
	30%	Maintenand	ce Operational and Environmental Restrictions
		50%	Maintenance Operational Restrictions
		50%	Environmental Capacity



Maintenance Capability Facilities

- Question: For each commodity group performed, what facility types are used to produce work you currently are assigned and what is the total weighted size of all facilities used for each commodity.
- Rationale: Facility condition and size, by type, are important. Question identifies facility size and condition used for each commodity for FY04 and FY09. FY09 captures MILCONs included in the FY04 appropriations bill.
- **Scoring:** The percent of weighted size (by condition) divided by total size. (Weighted size condition codes: C-1 = 100% of SF, C-2 = 90% of SF, C-3 = 70% of SF, C-4 = 50% of SF). The highest percentage, for each commodity, receives all points. The remaining percentages will be scored by linear normalization to the highest percentage.



Depot Maintenance

20%	CRITERIA 3:	FLEXIBILIT	TY TO SUPPORT UNKNOWN MISSIONS	
	35%	Maintenance Capability		
		100%	Workforce and Skills	
	45%	Surge and	Reconstitution	
		67%	Maximum Capacity	
		33%	Available Capacity	
	20%	Facilities a	nd Transportation Infrastructure	
		75%	Facilities	
		25%	Transportation Modes	
10%	CRITERIA 4	: OPERATIO	ON AND MANPOWER COSTS	
	45%	Direct Labo	or Costs	
		100%	Direct Labor Cost per Hour	
	45%	Other Cost	s (Minus Material)	
		100%	Other Cost per Hour	
	10%	Workforce	and Skills	
		100%	Stability	



Combat Field Support Maintenance

50%	CRITERIA 1:	READINES	S/CAPABILITY TO SUPPORT KNOWN MISSIONS
	30%	Maintenand	ce Capability
		100%	Workforce and Skills
	5%	Interservice	e e
		100%	Interservice Support
	65%	Proximity (Considerations
		85%	Proximity with Customer
		15%	Proximity with Depot
30%	CRITERIA 2	: AVAILABII	LITY AND CONDITION OF INFRASTRUCTURE
	10%	Expansion	Potential
		100%	Buildable Acres
	60%	Facilities	
_		100%	Size, Type, and Condition
	30%	Maintenand	ce Operational and Environmental Restrictions
		50%	Maintenance Operational Restrictions
		50%	Environmental Capacity



Combat Field Support Maintenance

15%	CRITERIA 3:	CRITERIA 3: FLEXIBILTIY TO SUPPORT UNKNOWN MISSIONS			
	40%	Maintenand	ce Capability		
		100%	Workforce and Skills		
	60%	Proximity (Considerations		
		70%	Proximity to Customers		
		30%	Proximity to Depot		
2%	CRITERIA 4	: OPERATIO	ON AND MANPOWER COSTS		
	100%	Manpower	per Output		
		100%	Total Manpower per Hour		



Ship Overhaul & Repair

- Functions
 - Depot Level (Naval Shipyards)
 - Intermediate Level
 - Non-Deployable I-Level only
 - Ship Intermediate Maintenance Activities
 & Trident Refit Facilities



25%	CRITERIA 1: READINESS/CAPABILITY TO SUPPORT KNOWN MISSIONS					
	25%					
		35%	•			
		25%				
		25%	Proximity to Ship Support Activities			
		15%	Environmental Compliance and Permit Capacity			
	50%	Woi	rkload Classification			
		30%	Unique and Specialized Capabilities			
		25%	Ship Type/Class Serviced			
		25%	Last Source			
		20%	Type of Ship Availabilities Performed			
	25% Workforce and Skills					
		40%	Specialized Skills and Certifications			
	_	35%	Quantity of Skilled Workers			
		25%	Workforce Development Opportunities			



25%	CRITERIA 2: AVAILABILITY AND CONDITION OF INFRASTRUCTURE					
	100%	100% Facilities				
		45%	Dry Dock Capacity			
		30%	Pier and Wharf Capacity			
		10%	Industrial Building Availability			
		10%	Dry Dock and Pier Crane Support			
		5%	Unique and Specialized Facilities			



30%	CRITERIA 3: CONTINGENCY, MOBILIZATION, FUTURE FORCE						
	45%	45% Facilities					
		45%	Dry Dock Capacity				
		5%	Pier and Wharf Capacity				
		15%	Industrial Building Availability				
		10%	Dry Dock and Pier Crane Support				
		25%	Unique and Specialized Facilities				
	35%	35% Workforce and Skills					
		30%	Specialized Skills and Certifications				
		20%	Quantity of Skilled Workers				
		50%	Workforce Development Opportunities				
	20% Flexibility						
		35%	Regulatory Ability to Expand Operations				
		35%	Utility Expansion Opportunity				
		30%	Contract Support and Expansion				



Ship Overhaul & Repair Depot Level Facilities – Dry Dock Capacity

Question: What are the characteristics of the dry docks at your facility?

Results will:

- Identify the largest ship class that will fit in each dock
- Identify the characteristics of each dry dock
 - Condition code
 - If dock is certified for nuclear-powered ships
 - Dry dock dimensions
- Provide information to compare overall dry dock capacity at ship overhaul and repair activities



Ship Overhaul & Repair Depot Level Facilities – Dry Dock Capacity

Dry Dock Number	Condition Code	Length (feet)	Width (feet)	Sill water depth at mean high water	Largest class ship that dry dock can accommodate	Number of portal and fixed cranes serving dry dock	Maximum crane lifting capacity at the dry dock (tons)	Nuclear certified

Scoring:

(70%) Largest class ship that will fit in dry dock receives 100%. The remaining will be scored by linear normalization to the highest number, weighted by ship size in tons.

(20%) Nuclear certified receives 100%. Not certified receives zero.

(10%) Highest condition code receives 100%. Unsatisfactory condition receives zero.



20%	CRITERIA 4: OPERATION AND MANPOWER COSTS					
	20%	20% Labor Costs				
		100%	Labor Rates			
	40%	40% Workforce and Skills				
		50%	Specialized Skills and Certifications			
		40%	Quantity of Skilled Workers			
		10%	Workforce Development Opportunities			
	40%	Efficiency				
		100%	History of Efficient Operations			



50%	CRIT	ΓERIA	1: READINESS/CAPABILITY TO SUPPORT KNOWN MISSIONS				
	45%	45% Proximity Considerations					
		70%	Proximity to Ship Home Ports				
		10%	Proximity to Other DoD				
		10%	Proximity to Ship Support Activities				
		10%	Environmental Compliance and Permit Capacity				
	35%	kload Classification					
		30%	Taking Maintenance & Repair to the Fleet				
		70%	Type of Ship Maintenance & Repair Performed				
	20%	Wor	kforce and Skills				
		30%	Specialized Skills and Certifications				
		30%	Quantity of Skilled Workers				
		10%	Educational (Workforce Development) Opportunities				
		30%	Military Sea/Shore Rotational Billets				



15%	CRITERIA 2: AVAILABILITY AND CONDITION OF INFRASTRUCTURE					
	70% Facilities					
		25%	Dry Dock Capacity			
		25%	Pier and Wharf Capacity			
		25%	Industrial Building Availability			
		15%	Dry Dock and Pier Crane Support			
		10%	Unique and Specialized Facilities			
	30% Real Estate					
		100%	Expansion Potential			



25%	CRIT	ERIA 3	3: CONTINGENCY, MOBILIZATION, FUTURE FORCE		
	45%	Faci	lities		
		25%	Dry Dock Capacity		
		35%	Pier and Wharf Capacity		
		15%	Industrial Building Availability		
		15%	Dry Dock and Pier Crane Support		
		10%	Unique and Specialized Facilities		
	35%	Wor	kforce and Skills		
		25%	Specialized Skills and Certifications		
		25%	Quantity of Skilled Workers		
		25%	Educational (Workforce Development) Opportunities		
		25%	Military Sea/Shore Rotational Billets		
	20%	20% Plant Value (Planned/recent operational capability improvements)			
		100%	Recent and Programmed Capital Investments		





Next Steps

- ✓ Data Standardization of M.V. questions & data call release
- ✓ Analyze Capacity Data Call Responses
- ✓ Develop potential scenarios and additional data requirements